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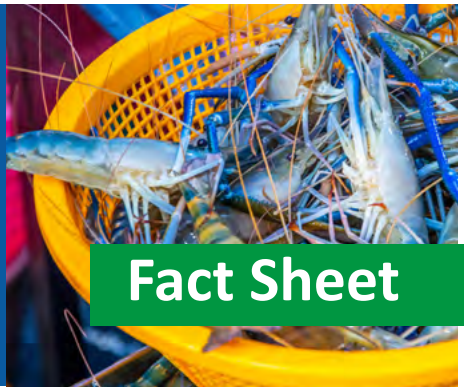
Federal Agency for Nature Conservation

# Europe‘s growing appetite for shrimp

## Peeling back the layers of a biodiversity crisis



**Fact Sheet**

### Key messages

- Shrimp ranks among the protein sources with the most rapid growth in consumption across the European Union (EU). Imports of farmed shrimp increased by 60% between 2012 and 2023, with about half originating from Ecuador and the rest coming from Southeast Asia and other Latin American countries.
- The global expansion of shrimp farming is endangering mangrove forests, primarily due to large-scale conversion into aquaculture. These forests are biodiversity hotspots and crucial for coastal protection and carbon storage.
- While mangrove loss in Ecuador has slowed due to protective measures, large mangrove areas are still being cleared for shrimp farms especially in Southeast Asia.
- Shrimp farms have a significant environmental impact due to their large land requirements (about 463,000 hectares to meet EU demand), use of feed and chemicals, and pollution of surrounding waters.

## From luxury to everyday staple

Once considered a luxury food, shrimp has become one of the EU’s fastest-growing protein sources. Imports are soaring and global shrimp aquaculture has more than doubled in the past 20 years, reaching 6 million tonnes in 2023.

However, this rapid expansion comes at a high ecological cost, particularly to tropical mangrove forests as biodiversity hotspots. Mangroves are cleared to make way for industrial shrimp ponds, with over one-third of the world’s mangroves being lost between 1980 and 2000. More than half of this loss was due to conversion into coastal aquaculture farms, and only about 14.7 million hectares of mangroves remain worldwide.

### Shrimp: EU consumption at a glance

**Popularity:** Third most popular seafood in the EU, accounting for 10% of all fish and seafood imports in 2023

**EU consumption:** 1.68 kg per person per year

**Sources:** ~50% farming, ~50% wild-caught

**Domestic production:** EU produces only 12% of its consumed shrimp

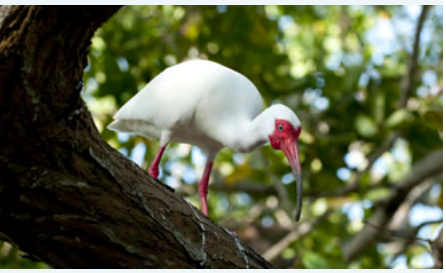
**Import:** 404,000 tonnes farmed shrimp in 2023

**Trends:** Import volume increased by 60% since 2012

**Top suppliers:** Ecuador, Vietnam, Venezuela, India

**Land footprint:** 463,000 ha (including ponds, infrastructure, feed) for EU consumption; roughly 1.9 times the size of Luxembourg

## Why mangroves matter



**Hotspots of biodiversity:**
Nursery and refuge for over 1,500 species

**Natural protection**
against storms and coastal erosion

**Livelihoods**
depend on healthy mangrove ecosystems

**Carbon sink champions:**
Storing vast amounts of $CO_2$

## How are mangroves impacted today?

Ecuador – which supplies around half of the farmed shrimp imported to the EU – provides a positive example:

- A 1990s legal ban slowed the loss of mangroves after heavy deforestation from the 1960s to the 1980s.
- The adoption of sustainable farming methods and reforestation projects has encouraged more responsible practices within the country's shrimp industry.

However, significant mangrove loss continues in Southeast Asia:

- This region supplies about 32% of the EU's shrimp imports and is home to nearly half of the world's mangroves.
- Between 2001 and 2022, the region lost around 360,000 hectares of mangroves, equivalent to 7.4% of its total stock and fourteen times the size of Luxembourg.

## How harmful are shrimp farms?

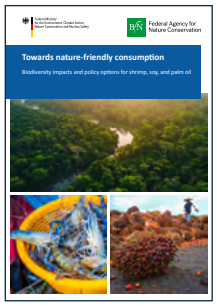
Shrimp farms cause significant environmental problems, the extent of which varies between intensive and extensive systems. Especially in intensive shrimp farms:

- Flow-through systems discharge polluted wastewater. The extensive use of feed, antibiotics, and chemicals leads to over-fertilisation, algal blooms, oxygen loss, and thus severe harm to aquatic life.
- Chemical residues can remain in shrimp, posing health risks to consumers and workers.

Extensive shrimp farming involves fewer animals and minimal chemical use, resulting in a lower environmental impact.

### Further reading

In the main report, you will find further details and sources on the impacts of EU shrimp consumption on biodiversity – as well as political solution approaches.




## Imprint

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